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### AMENDMENTS TO THE CLAIMS

1. (Currently amended) A grating image having one or more grating fields, each of which includes an electromagnetic-radiation-influencing grating pattern comprising a plurality of grating lines, the grating lines being characterized by the parameters orientation, curvature, spacing and profile, ~~characterized in that~~, wherein in the grating image, a grating field that is separately perceptible with the naked eye includes an electromagnetic radiation-influencing grating pattern having grating lines for which at least one of the characteristic parameters orientation, curvature, spacing and profile varies across the surface of the grating field.

2. (Currently amended) The grating image according to claim 1, ~~characterized in that~~ wherein said grating field includes an electromagnetic radiation-influencing grating pattern comprising uninterrupted grating lines.

3. (Currently amended) The grating image according to claim 1 ~~or 2~~, ~~characterized in that~~ wherein the varying characteristic parameter(s) exhibit a continuous variation across the surface of the grating field.

4. (Currently amended) The grating image according to claim 1 ~~or 2~~, ~~characterized in that~~ wherein the varying characteristic parameter(s) exhibit a random, ~~especially a random and discontinuous~~ variation across the surface of the grating field.

5. (Currently amended) The grating image according to ~~at least one of~~ claims 1 ~~to 4~~, ~~characterized in that~~ wherein said grating field includes at least one further electromagnetic radiation-influencing grating pattern having grating lines for which at least one of the characteristic parameters orientation, curvature, spacing and profile varies across the surface of the grating field.

6. (Currently amended) The grating image according to claim 5, ~~characterized in that~~ wherein the electromagnetic radiation-influencing grating patterns exhibit a variation in those same parameters.

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7. (Currently amended) The grating image according to claim 5 ~~or 6~~, ~~characterized in that~~ wherein the grating lines of the electromagnetic radiation-influencing grating pattern differ from one another by a non-varying characteristic parameter, ~~especially by the orientation of the grating lines.~~

8. (Currently amended) The grating image according to ~~at least one of claims 1 to 7~~, ~~characterized in that~~ wherein said grating field forms a matte pattern that displays no diffractive effects when viewed.

9. (Currently amended) The grating image according to ~~at least one of claims 1 to 8~~, ~~characterized in that~~ wherein the grating fields exhibit different optical brightness.

10. (Currently amended) A grating image having multiple grating fields, each of which includes an electromagnetic radiation-influencing grating pattern comprising a plurality of grating lines, the grating lines being characterized by the parameters orientation, curvature, spacing and profile, and a first grating field including grating lines having first characteristic parameters, and a second, adjacent grating field including grating lines having second characteristic parameters, ~~characterized in that~~ wherein between the first and second grating field is provided a transition area in which the characteristic parameters of the grating lines of the first grating field continuously change into the characteristic parameters of the grating lines of the second grating field.

11. (Currently amended) The grating image according to claim 10, ~~characterized in that~~, wherein in the transition area, the grating lines of the first grating field change without interruption into grating lines of the second grating field.

12. (Currently amended) The grating image according to claim 10, ~~or 11~~, ~~characterized in that~~ wherein the transition area exhibits a size below the resolution limit of the naked eye.

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13. (Currently amended) The grating image according to claim 10 ~~or 11, characterized in that~~, wherein to achieve additional optical effects in the transition area, the transition area exhibits a size above the resolution limit of the naked eye.

14. (Currently amended) The grating image according to ~~at least one of claims 10 to 13, characterized in that~~ wherein the first and/or second grating field constitutes a grating field ~~according to one of claims 1 to 9~~ that is separately perceptible with the naked eye.

15. (Currently amended) The grating image according to claim 14, ~~characterized in that~~ wherein one of the two grating fields forms a matte pattern that displays no diffractive effects when viewed.

16. (Currently amended) The grating image according to ~~at least one of claims 10 to 15, characterized in that~~ wherein at least one of the grating fields exhibits different optical brightness.

17. (Currently amended) The grating image according to ~~at least one of claims 1 to 16, characterized in that~~ wherein the grating lines are electron beam lithographically produced.

18. (Currently amended) The grating image according to ~~at least one of claims 1 to 17, characterized in that~~ wherein the grating lines exhibit a line profile depth between about 100 nm and about 400 nm.

19. (Currently amended) The grating image according to ~~at least one of claims 1 to 18, characterized in that~~ wherein the grating image is coated with a reflecting or high-index material.

20. (Currently amended) The grating image according to ~~at least one of claims 1 to 19, characterized in that~~ wherein the grating image includes a machine-readable identifier that is not visible with the naked eye.

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21. (Currently amended) The grating image according to ~~at least one of claims 1 to 20, characterized in that~~ wherein the grating image is combined with a color-shifting thin-film structure.

22. (Currently amended) A method ~~for~~ of manufacturing a grating image, ~~in which are produced~~ comprises forming in a substrate one or more grating fields, providing each of ~~which is filled~~ the grating fields with an electromagnetic radiation-influencing grating pattern filling the grating fields and comprising a plurality of grating lines, the grating lines being characterized by the parameters orientation, curvature, spacing and profile, ~~characterized in that, and~~ in the grating image, a grating field that is separately perceptible with the naked eye is filled with an electromagnetic radiation-influencing grating pattern having grating lines for which at least one of the characteristic parameters orientation, curvature, spacing and profile is varied across the surface of the grating field.

23. (Currently amended) A method ~~for~~ of manufacturing a grating image, ~~in which are produced~~ comprises forming in a substrate multiple grating fields, providing each of ~~which is filled~~ the grating fields with an electromagnetic radiation-influencing grating pattern filling the grating fields and comprising a plurality of grating lines, the grating lines being characterized by the parameters orientation, curvature, spacing and profile, and a first grating field being filled with grating lines having first characteristic parameters and a second, adjoining grating field being filled with grating lines having second characteristic parameters, ~~characterized in that~~ and between the first and second grating field is produced a transition area in which the characteristic parameters of the grating lines of the first grating field continuously change into the characteristic parameters of the grating lines of the second grating field.

24. (Currently amended) A security element having a grating image according to at least one of claims 1 ~~to 21~~.

25. (Currently amended) The security element according to claim 24, ~~characterized in that~~ wherein the security element is a security thread, a label or a transfer element.

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26. (Currently amended) A security paper having a security element according to claim 24 or 25.

27. (Currently amended) A data carrier having a grating image according to at least one of claims 1 to 21, a security element according to claim 24 or 25, or a security paper according to claim 26.

28. (Currently amended) The data carrier according to claim 27, ~~characterized in that~~ wherein the data carrier is a banknote, a value document, a passport, an identification card or a certificate.

29. (New) The grating image according to claim 4, wherein the varying characteristic parameter(s) exhibit a random and discontinuous variation across the surface of the grating field.

30. (New) The grating image according to claim 7, wherein the non-varying characteristic parameter is the orientation of the grating lines.

31. (New) The grating image according to claim 10, wherein the grating lines are electron beam lithographically produced.

32. (New) The grating image according to claim 10, wherein the grating lines exhibit a line profile depth between about 100 nm and about 400 nm.

33. (New) The grating image according to claim 10, wherein the grating image is coated with a reflecting or high-index material.

34. (New) The grating image according to claim 10, wherein the grating image includes a machine-readable identifier that is not visible with the naked eye.

35. (New) The grating image according to claim 10, wherein the grating image is combined with a color-shifting thin-film structure.

36. (New) A security element having a grating image according to claim 10.

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37. (New) A data carrier having a grating image according to claim 10.